

ABSTRACT OF THE DISCLOSURE

There is provided a digital image encoding device which can enhance image compression performance while maintaining an image quality. When coefficient bits are decomposed/aligned in four encoded paths for each context by a procedure called coefficient bit modeling of a JPEG 2000 encoding system, if an appearance frequency of "1" is low in subbit plane coefficients of a clean-up path of a low-order bit plane n (bit plane n is lower in order than bit plane n_p represented by threshold value n_p), coefficients of subbit planes of this clean-up path are all reset to "0." Thus, a run length used when a symbol and a context are generated is made longer and, as a result, the amount of codes after arithmetic encoding at a subsequent stage is reduced while an image quality deterioration is suppressed.